



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/522,451

02/11/2008

Erkki Laiho

37488.01300US

8674

38647

7590

05/27/2009

MILBANK, TWEED, HADLEY & MCCLOY LLP
INTERNATIONAL SQUARE BUILDING
1850 K STRET, N.W., SUITE 1100
WASHINGTON, DC 20006

EXAMINER

CHIN, HUI H

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

05/27/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/522,451	Applicant(s) LAIHO ET AL.	
	Examiner HUI CHIN	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-43 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/20/2005</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:

Abstract: "6000 g/mol" is suggested to be changed to – 60,000 g/mol --.

Appropriate corrections are required.

Double Patenting

2. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

Art Unit: 1796

3. Claims 1-2, 5, 8-9, 11-19, 26-29, and 31 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-2, 5-7, 9-17, 30-33, and 35 of copending Application No. 11/793,018. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 6-7, 9-16, 19-21, 24-25, 30-31, 37-38, and 41-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Myhre et al. (US 2006/0014897) in view of Van Dun et al. (US Patent 7,129,296).

Myhre et al. discloses a film composition comprising a filler and a bimodal polyethylene composition, further comprising a first low molecular weight component and a second higher molecular weight component wherein the bimodal polyethylene has a density of 918 to 935 kg/m³ (claim 1).

However, Myhre et al. are silent on the specific molecular weight.

Van Dun et al. disclose a polyethylene composition comprising a low molecular weight ethylene component in the range from about 10,000 to about 40,000 g/mole, and

Art Unit: 1796

a high molecular weight ethylene component in the range from about 100,000 to about 600,000 g/mole to provide a bimodal polyethylene composition that exhibits improved durability and environmental (tensile) stress cracking resistance (claim 1, col. 1, line 56, col. 2, line 51, col. 6, lines 1-2 and 33-34, col. 20, line 47). In light of such benefit, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the polyethylene with the specific molecular weights in the composition with the expected success.

The limitations of claim 6 can be found in Myhre et al. at [0033], where it discloses the density of 940 kg/m³.

The limitations of claim 7 can be found in Myhre et al. at claim 1, where it discloses the bimodal polyethylene.

The limitations of claim 9 can be found in Myhre et al. at claim 1, where it discloses the polyethylene.

The limitations of claim 10 can be found in Myhre et al. at Example 9, where it discloses the LLDPE.

The limitations of claim 11 can be found in Myhre et al. at claim 1, where it discloses the 37 to 48% by weight of low molecular weight component, 54 to 63% by weight of high molecular weight component, and 40-70% by weight of filler.

Claims 12-14 are inherent properties.

The limitations of claim 15 can be found in Myhre et al. at [0038], where it discloses the molecular weight distribution of 5 to 40.

The limitations of claim 16 can be found in Myhre et al. at [0039], where it discloses the filler having a particle size of 0.1 to 4 μ m.

The limitations of claim 19 can be found in Myhre et al. at [0050] and Example 9, where it discloses the multi-stage polymerization process.

The limitations of claim 20 can be found in Myhre et al. at Table 1, where it discloses the 0.6 mol%.

The limitations of claim 21 can be found in Myhre et al. at Table 1, where it discloses the 1-butene.

The limitations of claims 24-25, 37, and 41-43 can be found in Myhre et al. at Example 2, where it discloses the multi-stage polymerization process.

The limitations of claim 30 can be found in Myhre et al. at [0080], where it discloses the films.

The limitations of claim 31 can be found in Myhre et al. at Example 2, where it discloses the process.

The limitations of claim 38 can be found in Myhre et al. at [0080], where it discloses the cast films.

6. Claims 1, 2-4, 8, 26-29, and 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Dun et al. (US Patent 7,129,296) in view of Myhre et al. (US 2006/0014897).

The disclosure of Van Dun et al. is adequately set forth in paragraph 5 and is incorporated herein by reference.

However, Van Dun et al. are silent on the specific filler to be used.

Myhre et al. discloses a film composition comprising a filler and a bimodal polyethylene composition, further comprising a first low molecular weight component and a second higher molecular weight component to provide films with good mechanical properties and good processability (claim 1, [0009]). In light of such benefit, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the filler in the composition with the expected success.

The limitations of claims 2-4 can be found in Van Dun et al. at col. 6, lines 1-2 and Example 9, where it discloses the low molecular weight ethylene component such as LLDPE in the range from about 10,000 to about 40,000 g/mole.

The limitations of claim 8 can be found in Van Dun et al. at col. 6, line 34, where it discloses the high molecular weight ethylene component in the range from about 100,000 to about 600,000 g/mole.

The limitations of claim 26 can be found in Van Dun et al. at col. 18, lines 53-64, where it discloses the substrate.

The limitations of claim 27 can be found in Van Dun et al. at col. 18, line 66, where it discloses the plastic film.

The limitations of claims 28 and 29 can be found in Van Dun et al. at col. 19, line 4, where it discloses the LDPE.

The limitations of claim 34 can be found in Van Dun et al. at col. 18, line 52, where it discloses the extrusion coating.

The limitations of claim 35 can be found in Van Dun et al. at col. 18, line 53, where it discloses the method.

The limitations of claim 36 can be found in Van Dun et al. at col. 17, line 64, where it discloses the film.

7. Claims 5, 22-23, and 39-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Myhre et al. (US 2006/0014897) in view of Van Dun et al. (US Patent 7,129,296) as applied to claims 1, 6-7, 9-16, 19-21, 24-25, 30-31, 37-38, and 41-43, and further in view of Sakamoto et al. (US Patent 5,346,926).

The disclosure of Myhre et al. in view of Van Dun et al. is adequately set forth in paragraph 5 and is incorporated herein by reference.

However, Myhre et al. in view of Van Dun et al. is silent on the specific wax to be used.

Sakamoto et al. disclose a mixture by mixing 100 parts by weight of LDPE, 30 parts by weight of HDPE, and 1 part by weight of polyethylene wax having an average molecular weight of 2800 to improve on compatibility of the mixture (Example 1). In light of such benefit, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the specific wax in the composition with the expected success.

8. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Myhre et al. (US 2006/0014897) in view of Van Dun et al. (US Patent 7,129,296) as applied to

Art Unit: 1796

claims 1, 6-7, 9-16, 19-21, 24-25, 30-31, 37-38, and 41-43, and further in view of Ahlstrand (US 2003/0149162).

The disclosure of Myhre et al. in view of Van Dun et al. is adequately set forth in paragraph 5 and is incorporated herein by reference.

However, Myhre et al. in view of Van Dun et al. is silent on the specific filler to be used.

Ahlstrand discloses a polymer composition comprising a low molecular weight ethylene polymer, a high molecular weight ethylene polymer, and additives such as talc or calcium carbonate to provide better pressure resistance and properties compared to unimodal materials (claim 1, [0001], [0004], [0005], [0029]). In light of such benefit, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the specific filler in the composition with the expected success.

9. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Myhre et al. (US 2006/0014897) in view of Van Dun et al. (US Patent 7,129,296) as applied to claims 1, 6-7, 9-16, 19-21, 24-25, 30-31, 37-38, and 41-43, and further in view of Ahlstrand (US 2003/0149162).

The disclosure of Myhre et al. in view of Van Dun et al. is adequately set forth in paragraph 5 and is incorporated herein by reference.

However, Myhre et al. in view of Van Dun et al. is silent on the specific amount of antioxidant to be used.

Ahlstrand discloses a polymer composition comprising a low molecular weight ethylene polymer, a high molecular weight ethylene polymer, and 100 to 2000 ppm of antioxidant to provide better pressure resistance and properties compared to unimodal materials (claim 1, [0001], [0004], [0005], [0029]). In light of such benefit, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the specific amount of antioxidant in the composition with the expected success.

10. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Myhre et al. (US 2006/0014897) in view of Van Dun et al. (US Patent 7,129,296) as applied to claims 1, 6-7, 9-16, 19-21, 24-25, 30-31, 37-38, and 41-43, and further in view of Garoff et al. (US Patent 5,770,540).

The disclosure of Myhre et al. in view of Van Dun et al. is adequately set forth in paragraph 5 and is incorporated herein by reference.

However, Myhre et al. in view of Van Dun et al. is silent on the specific process to be used.

Garoff et al. disclose a high activity procatalyst comprising an inorganic support, a chlorine compound carried on said support, a magnesium compound carried on said support, and a titanium compound carried on said support, wherein the chlorine compound is the same or different from the magnesium compound and/or the titanium compound to provide a catalyst with high activity for the production of ethylene polymers (claim 1, col. 2, lines 5-7). In light of such benefit, it would have been obvious to one of

Art Unit: 1796

ordinary skill in the art at the time the invention was made to use the specific process to make the composition with the expected success.

11. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Myhre et al. (US 2006/0014897) in view of Van Dun et al. (US Patent 7,129,296) as applied to claims 1, 6-7, 9-16, 19-21, 24-25, 30-31, 37-38, and 41-43, and further in view of Casey et al. (US Patent 6,110,552).

The disclosure of Myhre et al. in view of Van Dun et al. is adequately set forth in paragraph 5 and is incorporated herein by reference.

However, Myhre et al. in view of Van Dun et al. is silent on the specific film coating line to be used.

Casey et al. disclose a composite release liner comprising a paper substrate and a polymer base layer applied on the substrate by a film coating line comprising an unwind, a wind, a chill roll and a coating die to make the multilayer material (claim 1, col. 4, lines 32-43). In light of such benefit, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the specific process to make the composition with the expected success.

Conclusion

Art Unit: 1796

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUI CHIN whose telephone number is (571)270-7350. The examiner can normally be reached on Monday to Friday; 8:00am - 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on 571-272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ling-Siu Choi/
Primary Examiner, Art Unit 1796

/HC/

Application/Control Number: 10/522,451
Art Unit: 1796

Page 12